

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re:	Marc O. Woontner	Confirmation No:	5715
Serial No:	10/772,752	Group:	2872
Filed:	February 5, 2004	Examiner:	Chang, Audrey Y.
For:	Tinted Holographic Printing Material		
Customer No.:	29127		
Attorney Docket No.	22176.28 (ITW-14460)		

## INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted:

- ☐ under 37 CFR 1.129(a), or  
(First/Second submission after Final Rejection)
- ☐ under 37 CFR 1.97(b), or  
(Within any one of the following time periods: three months of filing national application (other than a CPA) or date of entry of the national stage in an international application; or before the mailing date of a first office action on the merits in a non-provisional application, including a CPA, or a Request for Continued Examination).
- ☐ under 37 CFR 1.97(c) together with either:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, or
- ☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the 37 CFR 1.97(b) time period, but before final action or notice of allowance, whichever occurs first)
- ☒ under 37 CFR 1.97(d) together with:
- ☐ a Statement under 37 CFR 1.97(e), as checked below, and
- ☒ a \$180.00 fee under 37 CFR 1.17(p), or  
(Filed after final action or notice of allowance, whichever occurs first, but on or before payment of the issue fee)
- ☐ under 37 CFR 1.97(i):  
Applicant requests that the IDS and cited reference(s) be placed in the application filewrapper.  
(Filed after payment of issue fee)

Statement Under 37 CFR 1.97(e)

- ☐ Each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement; or
- ☐ No item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned, after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of this Information Disclosure Statement.

Statement Under 37 CFR 1.704(d) (Patent Term Adjustment)

Applies to original applications (other than design) filed on or after May 29, 2000

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.
- ☒ Enclosed herewith is form PTO-1449:
- ☒ Copies of the cited references are enclosed except US patent references.
- ☐ References cited were entered in prior application, U.S. Application No. \_\_\_\_\_, to which priority under 35 U.S.C. 120 is claimed. [The earlier application contains copies of the cited references.]
- ☐ The listed references were cited in the enclosed International Search Report in a counterpart foreign application.
- ☒ The "concise explanation" requirement (non-English references) for reference(s) [ ] under 37 CFR 1.98(a)(3) is satisfied by:
- ☐ the explanation provided on the attached sheet.
- ☐ the explanation provided in the Specification.
- ☐ submission of the enclosed International Search Report.
- ☒ submission of the enclosed English-language version of a foreign Office Action in a counterpart European application number 05 250 225.9.
- ☒ the enclosed English language abstract.

☐ Applicant requests that the following non-published pending applications be considered:

Examiner's  
Initials

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

\_\_\_\_\_ U.S. Patent Application No. [ ], by [inventor(s)], filed [ ], Docket No.: [ ]

Examiner

Date

- ☐ A copy of each above-cited application, including the current claims, is enclosed.
- ☐ A copy of each above-cited application, including the current claims, is enclosed, except those entered in prior application, U.S. Application No. [ ], to which priority under 35 U.S.C. 120 is claimed.

The Examiner is requested to return a copy of the above list of pending applications indicating which references were considered with the next office communication.

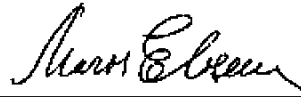
It is requested that the information disclosed herein be made of record in this application.

Method of payment:

- ☐ A check for the fee noted above is enclosed, or the fee has been included in the check with the accompanying Reply. A copy of this Statement is enclosed.
- ☒ Please charge Deposit Account 502 233 in the amount of \$[ 180.00 ]. A copy of this Statement is enclosed.
- ☐ Please charge any deficiency in fees and credit any overpayment to Deposit Account 502 233.
- ☐ No fee is required.

Respectfully submitted,

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By 

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Dated: July 20, 2006

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Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	1
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**Complete if Known**

Application Number	10/772,752
Filing Date	February 5, 2004
First Named Inventor	Marc O. Woontner
Art Unit	2872
Examiner Name	Chang, Audrey Y.
Attorney Docket Number	22176.28 (ITW-14460)

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (# known)				
		DE 44 31 531 A1	03/07/1996	Leonard Kurz GmbH & Co.		
		JP 05 289599 A	11/05/1993	Dainippon Printing Co Ltd		
		EP 0 467 601	01/22/1992	Applied Holographics		

Examiner Signature	Date Considered
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

**Bescheid/Protokoll (Anlage)**

Datum  
Date 24.02.2006  
Date

**Communication/Minutes (Annex)**

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Sheet 1  
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**Notification/Procès-verbal (Annexe)**

Anmelde-Nr.:  
Application No.: 05 250 225.9  
Demande n°:

The examination is being carried out on the **following application documents**:

<b>Description, Pages</b>	1-12	as originally filed
<b>Claims, Numbers</b>	1-14	as originally filed
<b>Drawings, Sheets</b>	1/4-4/4	as originally filed

The present application does not meet the requirements of Article 52(1) EPC, because the subject-matter of claims 1-4,7-11,13,14 is not new in the sense of Article 54(1) and (2) EPC, and the subject matter of claims 5,6,12 does not involve an inventive step in the sense of Article 56 EPC.

1. The following documents (D) are referred to in this communication; the numbering will be adhered to in the rest of the procedure:

D1: DE 44 31 531 A1 (LEONHARD KURZ GMBH & CO, 90763 FUERTH, DE) 7 March 1996 (1996-03-07)  
D2: PATENT ABSTRACTS OF JAPAN vol. 018, no. 081 (P-1690), 9 February 1994 (1994-02-09) -& JP 05 289599 A (DAINIPPON PRINTING CO LTD), 5 November 1993 (1993-11-05)  
D3: US-A-4 072 098 (GRANZOW ET AL) 7 February 1978 (1978-02-07)  
D4: US-A-5 781 316 (STRAHL ET AL) 14 July 1998 (1998-07-14)  
D5: EP-A-0 467 601 (APPLIED HOLOGRAPHICS CORPORATION) 22 January 1992 (1992-01-22)

2. In the application, two independent claims relate to a multi layer material (i.e. claims 1 and 10), therefore the application does not meet the requirements of Rule 29(2) EPC, according to which an European Patent Application may not contain more than one independent claim in the same category. Since it appears that claim 1 could be made dependent on claim 10 (claim 1 corresponds to claim 10 wherein the coloured layer is the embossed layer), the exceptions stated in paragraphs a), b), or c) of that rule are not applicable in the present context).

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Anmelde-Nr.:  
Application No.: 05 250 225.9  
Demande n°:

A similar objection holds also for the subject matter of independent method claims 7 and 11.

The applicant is therefore requested to file an amended set of claims which complies with Rule 29(2), EPC. Failure to do so, or to submit convincing arguments as to why the present set of claims does in fact comply with the requirement of Rule 29(2), will lead to a refusal under Article 97(1), EPC.

- 2.1 The application does not meet the requirements of Article 84 EPC, for the following reasons:-
- 2.2 In the whole application, the terms reflect/reflection/reflecting are used with the meaning of diffraction. Although an equivalence is defined on page 6 (line 16-18), reflection and diffraction correspond in the art to different optical functions such that the equivalence is confusing and cannot be admitted. Hence, the applicant is requested to replace "reflect.." by "diffract.." in the application (cf. claims 1,2,7,10,11 and the whole description).
- 2.3 It is clear from the description on page 2 lines 16-18 that the following features are essential to the invention:  
(1) the multi layer material is a thermal transfer material (i.e. comprises an adhesive layer); and,  
(2) the plurality of panels are coplanar.  
Since independent claims 1,7,10,11 do not contain these features the application does not meet the requirement of Article 84 EPC taken in combination with Rules 29(1) and (3) EPC, namely that any independent claim must contain all the technical features essential to the definition of the invention.
- 2.4 In claim 1, the expression "primary color" is unclear in the context. Indeed, since one colour corresponds to one panel, it is unclear how n ( $n < 256$  in claim 5) of such "primary color" can be defined.
- 2.5 The independent claims should refer to "an embossed layer", not to an "embossable layer".

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**Communication/Minutes (Annex)**

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Anmelde-Nr.:  
Application No.: 05 250 225.9  
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- 2.6 The feature added in claim 2 appears superfluous because it does not limit the subject matter of claim 1.
- 2.7 In view of the description (see page 7, lines 26-31), it cannot be understood how the method claim 13 can depend on claim 12 (both alternatives appear inconsistent).

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3. Objections according to Article 54 EPC - Lack of novelty.

- 3.1 The document **D1** discloses (the references in parentheses applying to this document): a multi-layer material (cf. Figures 2,3) for forming an image on a substrate (cf. Fig. 1) comprising an embossed layer (9) formed of a plurality of coplanar panels (like B or D in Figs. 2,3) arranged to diffract incoming light at various angles (although not exactly sketched Fig. 2, this condition is disclosed on page 7 lines 37-41). Further, each panel is tinted with different (cf. above objection §2.4) colours (cf. claim 11 in D1, or page 2, lines 45-48 and page 5, lines 27-37).

Each feature of claim 1 having a counterpart in the citation, that claim is not novel (Article 54(2), EPC). Accordingly, claims 2 and 10 are also not novel (see §2 and §2.5, above).

As to the corresponding method, the paragraph page 3, lines 3-14 in **D1** discloses the pixel transfer (see also the Figures in D1), then claims 7 and 11 are not novel.

- 3.2 The following additional features are also present in document **D1**, thereby anticipating corresponding dependent claims:-
- \* claim 3 : pixel distribution (see panel D in the figures and also page 5, lines 10-15);
  - \* claim 4 : a thermally stable layer (1), a top coat (7), a reflective layer (5') and a heat activated adhesive layer (4);
  - \* claim 8 : transfer through heat activation (page 3, lines 40-45; page 7, line 28);
  - \* claim 9 : computer controlling (page 7, lines 24-28);
  - \* claim 13 : stand alone pixels (cf. Fig. 1 and page 3, lines 11-14);
  - \* claim 14 : corresponding holographic image (cf. Fig. 1, page 2, lines 42-48).

**Bescheid/Protokoll (Anlage)**

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Date 24.02.2006  
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**Communication/Minutes (Annex)**

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**Notification/Procès-verbal (Annexe)**

Anmelde-Nr.:  
Application No.: 05 250 225.9  
Demande n°:

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4. Objections according to Article 56 EPC - Lack of an inventive step.
- 4.1 Here, **D1** will be considered as being the closest prior art, the features in common with the claims of the present application having been presented above.
- 4.2 Document **D2** is also pertinent toward the subject matter of the present claims. D2 discloses a ribbon of transfer material comprising consecutive panels that redirect light in various directions (cf. Fig. 6). The exact composition of D2's laminate is not clearly disclosed, however, the security aspect linked with a coded sequence of number is disclosed §1,4-6 ("the diffracted light from the hologram sections 34-37 can be used as a code signal") and Fig. 6 in D2.
- Therefore, in order to further raise the security nature of the device, this coding scheme can be added to the laminate disclosed in D1 such that the subject matter of claim 5 lack an inventive step. Further details concerning the coding aspect can be found in **D3** (see Fig. 5 and col.4, line 35 to col. 5, line 16).
- 4.3 Claims 6 (primary colors = YMCK) and 12 (blended pixels) add features that are common in the art of printing. Since D1 also refers to thermal printer (page 3, lines 28-35), these features cannot be considered to involve an inventive step.
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- 5.1 To meet the requirements of Rule 27(1)(b) EPC, the documents D1 and D2, should be identified in the description.
- 5.2 The features of the claims should be provided with reference signs placed in parentheses to increase the intelligibility of the claims (Rule 29(7) EPC). This applies to both the preamble and characterising portion (see the Guidelines, C-III, 4.11).
- 5.3 Independent claim should be cast in the two-part form in accordance with Rule 29(1) EPC.



**Bescheld/Protokoll (Anlage)**

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Date 24.02.2006  
Date

**Communication/Minutes (Annex)**

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**Notification/Procès-verbal (Annexe)**

Anmelde-Nr.:  
Application No.: 05 250 225.9  
Demande n°:

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- 6.1 Should the applicant intend to amend claims so as to include features which were not part of the claims as originally filed, his attention is directed to Rule 86(4), EPC.
- 6.2 The applicant is requested to clearly identify the amendments carried out and to indicate the passages of the application as filed on which these amendments are based. (these indications could be submitted in handwritten form on a copy of the relevant parts of the application as filed).
- 6.3 When filing amended claims the applicant should at the same time bring the description into conformity with the amended claims. Care should be taken during revision, especially of the introductory portion and any statements of problem or advantage, not to add subject-matter which extends beyond the content of the application as originally filed (Article 123(2) EPC).
- 6.4 The applicant is requested to effect the amendments by filing replacement pages for only those pages which have been amended.